Ventura's Water Quality Summary 2007

Utilizing data collected in 2006.

Only water quality constituents detected by laboratory testing appear in the chart.

PRIMARY STANDARDS (PDWS)	Units	Maximum Level MCL	State Goal PHG	Ventura River Average	Ventura River Range	Ground Water Average	Ground Water Range	CMWD Average	CMWD Range	Major Sources of Contamination in Drinking Water (Footnotes)
Water Clarity										
Treated Turbidity	NTU	TT	NA	0.17 (a)	0.12 - 0.24(a)	0.17	0.1 - 0.44	0.06 (b)	0.01-0.06 (b)	1
Radioactive Contaminants (e)										
Gross Alpha particle activity	pCi/l	15	NA	4.65	1.7 - 10.0	7.5	1.9 - 17.5	1.1	0.3 - 2.1	2
Radium 226	pCi/l	5	NA	0.10	ND - 0.23	0.50	0.12 - 0.89	NA	NA	2
Uranium (c)	pCi/l	20	0.5	3.13	2.1 - 4.0	4.8	3.8 - 6.8	NA	NA	2
Inorganic Contaminants										
Arsenic	ppb	50	0	ND	ND	ND	ND	ND	ND	3
Fluoride	ppm	2	1	0.39	0.32 - 0.48	0.49	0.37 - 0.58	0.4	0.4	4
Selenium	ppb	50	NA	ND	ND	15	ND - 20	ND	ND	5
Nitrate (as Nitrogen)	ppm	10	10	ND	ND - 0.20	1.9	ND - 2.2	2.6	1.8 - 4.1	6

Lead and Copper Samples	Units	RAL	PHG	Samples Collected	Above RAL	90th Percentile	Major Sources of Contamination in Drinking Water
Lead	ppb	15	2	55 (d)	1	9	7
Copper	ppm	1.3	0.17	55 (d)	1	1.09	7

Footnotes: [1] Process and source variations [2] Erosion of natural deposits [3] Erosion of natural deposits; runoff from orchards; glass and electronics production waste [4] Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. [5] Discharge from refineries or manufacturers; erosion of natural deposits. [6] Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits. [7] Internal corrosion of household plumbing systems

PRIMARY STANDARDS for Distribution System	Units	MCL MRDL	PHG (MCLG) MRDLG	Distribution System Average	Distribution System Range	Major Sources of Contamination in Drinking Water
Disinfection						
Chloramine Residual	ppm	4	4	2.3	1.1 - 3.9	Drinking water disinfectant added for treatment.
Disinfection By Products						
Total Trihalomethanes	ppb	80	NA	35 (c)	5 - 84	By-product of drinking water chlorination.
Total Haloacetic Acids	ppb	60	NA	35 (c)	2 - 103	By-product of drinking water chlorination.
Microbiological Contaminant Samples						
Total Coliform Bacteria	NA	5%	0	0	0	Naturally present in the environment.
Fecal Coliform Bacteria	NA	0	0	0	0	Human and animal fecal waste.

SECONDARY STANDARDS		Units	Maximum Level MCL	Ventura River Average	Ventura River Range	Ground Water Average	Ground Water Range	CMWD Average	CMWD Range
Aesthetic Standards	Color	Color	15	1.6	ND - 4	5.3	ND - 16	ND	ND
	Odor	Threshold	3	ND	ND	ND	ND	ND	ND
	Chloride	ppm	500	27	17 - 43	67	55 - 79	14	14
	Corrosivity	ppb	Non corrosive (+)	0.07	-0.16 - 0.47	0.48	0.3 - 0.85	-0.3	-0.3
	Iron (TT)	ppb	300	ND	ND	ND	ND - 110	NS	NS
	Total dissolved solids	ppm	1000	526	418 - 760	1292	1042 - 1546	340	340
	Specific conductance	umhos	1600	692	521 - 931	1662	1421 - 2160	541	541
	Sulfate	ppm	500	166	117 - 247	537	388 - 776	120	120
Additional Constituents	pH	pH units	6.5 - 8.5	7.6	7.3 - 7.9	7.5	7.3 - 7.8	7.3	7.3
	Hardness	ppm	NS	300	229 - 402	602	528 - 689	217	217
	Calcium	ppm	NS	82	58 - 113	161	144 - 180	54	54
	Magnesium	ppm	NS	23	20 - 29	49	36 - 58	20	20
	Manganese (TT)	ppb	50	ND	ND	ND	ND - 40	ND	ND
	Sodium	ppm	NS	31	21 - 54	131	94 - 174	23	23
	Phosphate	ppm	NS	0.22	0.15 - 0.40	0.21	ND - 0.51	NS	NS
	Potassium	ppm	NS	2.3	2.0 - 2.5	4.7	3.7 - 6.3	3	3
	Total Alkalinity	ppm	NS	155	131 - 194	260	219 -283	130	130

Footnotes: (a) Average is maximum reading Avenue Plant Surface Filtration (TT) = 95% of samples equal or below 0.3 NTU. (b) Average is maximum reading, CMWD Direct Filtration (TT) = 95% of samples equal or below 0.5 NTU
(c) Highest running average cannot exceed the MCL. (d) Samples were taken at selected households on a first draw in August 2005. (e) Monitoring completed in 2003 and 2004.

Legend

ppm: Parts per million or milligrams per liter.
pCi/l: Picocuries per liter, a measure of radioactivity in water.
CMWD: Casitas Municipal Water District
TT: A required process intended to reduce the level of contaminant in drinking water
ppb: Parts per billion or micrograms per liter.
NA: Not applicable
ND: Not detectable
NS: No standard
NTU: Turbidity, a measure of the clarity or cloudiness of the water.

Water Quality Terminology

The Water Quality Summary shows constituents measured in Ventura's water and reported to the State Department of Health Services, and in some cases the USEPA. Some of the terminology used is described below:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary (health related) MCLs are set as close to the Public Health Goals (PHGs) or Maximum Contaminant Level Goals (MCLGs) as is economically and technologically feasible. Secondary (aesthetically related) MCLs are set to protect the odor, taste and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of contaminant in drinking water below which there is no known or expected risk to one's health. MCLGs are set by the USEPA.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to one's health. The California Environmental Protection Agency sets PHGs.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below, which there is no known or expected risk to health. MRDLs are set by the USEPA.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

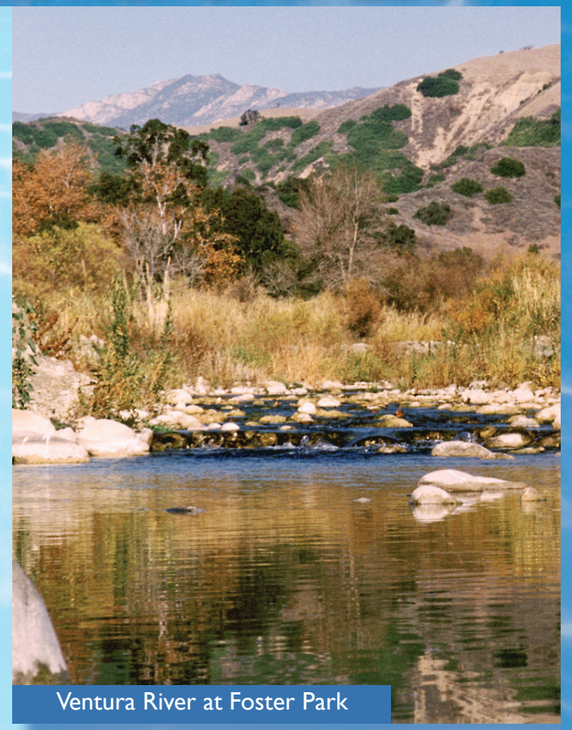
Regulatory Action Level (RAL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

WATER QUALITY CONFIDENCE REPORT 2007

The City of Ventura welcomes this opportunity to provide you with water quality information. Ventura's Water Division works to ensure that Ventura's water meets or exceeds state and federal standards. This Water Consumer Confidence Report was prepared in compliance with regulatory requirements. The data presented was gathered predominantly in 2006; however, many constituents are monitored less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some data, though representative, may be more than one year old.

In order to produce, treat and distribute safe water to our customers, the City owns and operates 11 wells, three water treatment plants, 23 booster pump stations, 31 water storage reservoirs and more than 500 miles of distribution pipelines.

Este informe contiene información muy importante sobre su agua potable. Para más información o obtener copias del informe de agua en español llame 805.652.4500.



Ventura River at Foster Park

YOUR WATER CONSERVATION EFFORTS ARE IMPORTANT!

Water is a precious commodity in Southern California, especially during drought years. The needless waste of water raises everyone's bill. Unused water can be stored and made available for future needs. Here are some important ways for water users to conserve our water supply:

Nestor Rodriguez
Will Rogers Elementary
2007 Conserve Our Water
Coloring Contest Winner

- Request a free Customer Service Guide for conservation tips at 805.667.6500.
- Irrigate your landscape in the later evening or early morning to prevent evaporation.
- Use only the amount of water your lawn can absorb – never let water run to the gutter.
- **NEVER** hose down sidewalks, driveways, etc. – use a broom instead.
- Always use hose nozzles that shut-off flow when washing vehicles and other equipment.

Water customers may call 805.652.4568 for helpful ways to conserve water or to schedule an appointment with City staff for a free onsite evaluation to obtain timed watering plans for winter and summer irrigation. Free water conserving showerheads are also available to our customers at the information counter in City Hall.

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Ventura's water meets or exceeds state and federal primary standards.

Ventura's Water Sources

The City has three local water sources; each accounts for approximately one third of the entire water supply. A portion of Ventura s water is from the Ventura River and is pumped from four shallow wells and a subsurface collector. Water is also purchased from Lake Casitas, which is operated and treated by the Casitas Municipal Water District (CMWD), for distribution through the City system to customers. Additional water is pumped from groundwater wells located in the City s east side.

Water Treatment

All of the City's water receives treatment. Water from the Ventura River is treated by a method referred to as Conventional Surface Water Treatment. This process involves coagulation (chemical addition), flocculation (gentle agitation), sedimentation (settling particles), filtration (removing particles), and disinfection (killing bacteria and viruses) with chloramines. The groundwater sources are treated with direct media filtration to remove iron, manganese, and turbidity, and disinfected with chloramines. Additional treatment is provided at each plant to help minimize the corrosion of plumbing in your home.

CMWD treats the water from Lake Casitas with direct media filtration and with chloramines for disinfection prior to delivery into the City s system. Turbidity is a measure of the cloudiness of the water. The City and CMWD are required to monitor for turbidity because it is a good indicator of water quality and the effectiveness of the filtration processes. High turbidity can hinder the effectiveness of the disinfectants.

The City uses chloramines for disinfection. Chloramines are chemicals that contain chlorine and ammonia. Chloramines were selected as the preferred disinfectant because of their ability to provide disinfection over an extended period of time, and for better taste and fewer odors compared to using chlorine alone. Chloramines have been proven to effectively kill microorganisms while producing lower levels of byproducts such as trihalomethanes (TTHMs) and haloacetic acids (HAAs), which are potentially harmful. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of cancer.

Although Chloramines are desirable in protecting the water distribution system, their use requires additional precautions for some water uses. If a member of your household requires dialysis, you should contact your physician or dialysis service provider to assure proper protective equipment is used. If you use tap water for fish or other aquatic animals that use gills for breathing, you need to test and be sure the chloramines are completely removed before use. Setting water in an open container for 24 hours prior to use will not remove all chloramines in the water. Your local pet store can provide information and products for the proper removal of chloramines.

Water Quality Monitoring and Reporting

Ventura owns and operates a full-scale, state-certified laboratory to monitor water quality. Outside state-certified labs are also used as necessary. State-certified operators run Ventura's treatment plants. The plants have instrumentation that continuously monitors specific water constituents to ensure that the water is of high quality. Water quality constituents that were detected during 2006 are listed on the Water Quality Summary Table (see back page).

The United States Environmental Protection Agency (USEPA) through the Safe Drinking Water Act establishes drinking water standards, monitoring and reporting protocols. The California Department of Health Services enforces the drinking water standards for the USEPA and has the authority to make standards more stringent if applicable to California. The City conducts monitoring beyond the minimum requirements for some federal and state regulations.

The City submits monthly and annual reports to the state for review that summarize treatment performance and drinking water quality. The state inspects the City's water system each year and submits their findings to the City. The state prepared an Engineering Report dated February 2006, finding that the city's sources, facilities, and operation are capable of producing a safe, wholesome and reliable quality of water supply; and meet the state and federal standards and regulations for drinking water.

Since 2002, the City has monitored water quality along the Ventura River and San Antonio Creek for Cryptosporidium, Giardia, Bacteria, Nutrients, Bromide, Total Organic Carbon, Chloride and Conductivity. This additional testing is part of an expanded sampling program to detect potential contaminants in the watershed allowing the City to better plan future production and treatment improvements.

Water System Studies & Improvements

A Water System Master Plan is prepared every 10 years and is underway. The current plan will be completed by the end of 2007. The plan will include recommendations for capital improvements based on an analysis of water supply, distribution, and quality. Current improvement projects underway include replacement of the Avenue Water Treatment Plant filtration process, evaluating Foster Park well field strategies, additional water storage on the eastside of the City, improvement of various water mains throughout the City, addition of new well capacity in the Saticoy area, emergency generators for operation of critical facilities, and energy efficient electrical systems for booster stations.

The City, like other water purveyors in the country, completed a federally mandated review of its water system security. This review evaluated the water facilities and prioritized security measures that can help minimize the risk of damage or contamination. The City already has and will continue to take steps to improve the protection of City water facilities.

In April 2006 the City completed the five-year update to the Sanitary Survey of the Lower Ventura River Watershed. The purpose of the study is to identify potential sources of contamination within the watershed, to make recommendations on how to reduce risks to the water supply, and to make adjustments to the ongoing watershed monitoring program.

A separate Drinking Water Source Assessment for the City's water supplies was completed in January 2002. The purpose of the assessment is to identify existing or potential threats to every source of supply including groundwater. No contaminants have been detected in the water supply from such surrounding sources as gas stations, agricultural drainage, dry cleaners, urban run off, sewer systems, metal plating/finishing and repair shops.

As a water supplier, the City must complete an evaluation of its drinking water supply with respect to Public Health Goals (PHG) every three years. The goals are advisory only, requiring public notification, and are not mandatory limits. The City completed the last evaluation in 2004, which determined that six chemicals, although well below the maximum contaminant level limit, exceeded a PHG. These were lead, copper, uranium, gross alpha & beta particles, and radium 226. Copper and lead can be found in water as a result of the corrosion of plumbing fixtures used in most homes. The City has conducted tests to optimize its treatment with corrosion inhibitors in an effort to further reduce lead and copper levels. High levels of lead can result in kidney problems or high blood pressure, and delays in physical and mental development in children. High levels of copper are known to cause gastrointestinal disturbance and kidney damage. The remaining four chemicals are naturally occurring radioactive isotopes that typically occur in drinking water by the erosion of natural deposits and are considered carcinogenic. Other effects of uranium in the kidneys and the liver have been documented. Radium is known to cause tumors.

Potential Concerns

In order to ensure tap water is safe, the United States Environmental Protection Agency (USEPA) and the California Department of Health Services prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The City of Ventura treats its water to meet these regulations. The regulations of the Food and Drug Administration establish limits for contaminants in bottled water, which must provide the same protection for the public health.

Drinking water, including bottled water, may contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 1.800.426.4791.

Sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up contaminants resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agriculture and livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals that may be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides from a variety of sources, such as agriculture, urban stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems.
- Radioactive contaminants that can be naturally occurring or be the result of oil and gas production and mining activities.

Some people are more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals, such as people with cancer, those undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people and infants can be particularly at risk from infections and are at greater risk of developing life-threatening illnesses. The City encourages immuno-compromised individuals to consult their doctors regarding appropriate precautions to avoid infection.

The City takes precautions to eliminate the risk of infection from microbial contaminants, including Giardia and Cryptosporidium, from its water system. The new membrane filtration improvements being installed at the Avenue Treatment Plant are very effective at removing these contaminants. These organisms are found in surface water throughout the United States and ingesting them may cause an abdominal infection. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the infection within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness, and are encouraged to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water. The City has been sampling for possible risks present in the Ventura River Watershed since 2000, with only one sample detected for Cryptosporidium. Casitas monitored for Cryptosporidium during 2006 on a monthly basis with a result of non-detect for 11 samples of 12 total. The City's and Casitas' current treatment processes for surface water including coagulation, filtration and Chloramines disinfection to remove these organisms are not 100% effective. The USEPA and the Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial contaminants are available from the Safe Drinking Hotline at 1-800-426-4791.

For More Information

If you would like more information regarding the City's water quality, facility improvements, or studies, please contact Ventura's Water Superintendent at 805.652.4500. This Water Quality Confidence Report is also available on the City's website at www.cityofventura.net

You are invited to express your opinions at City Council meetings held each Monday at 7 p.m. in the Council Chambers at Ventura City Hall, 501 Poli Street.

WATER QUALITY CONFIDENCE REPORT 2007